

# Notice of Allowability

Application No.

10/073,674

Examiner

Mark Ruthkosky

Applicant(s)

LAMPE-ONNERUD ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2/15/2005.
2. ☒ The allowed claim(s) is/are 1,3-5,9 and 12.
3. ☒ The drawings filed on 10 June 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 5/24/2004
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

Claims 1, 3-5, 9-10 and 12 are pending in the application prosecution. The applicant has canceled claims 2, 6-8 and 11. Claims 13-23 are canceled in this office action.

### ***Election/Restrictions***

This application is in condition for allowance except for the presence of claims 13-23, which are non-elected without traverse. Accordingly, claims 13-23 <sup>have</sup> been cancelled. MR

### ***Examiner's Amendment***

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Cancel claims 13-23.

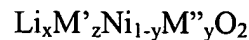
### ***Claim Rejections - 35 USC § 102***

The rejection of claims 1-6 and 8-10 under 35 U.S.C. 102(b) as being anticipated by Kitano (JP 2000-149,950) has been overcome by the applicant's amendment.

*Allowable Subject Matter*

Claims 1, 3-5, 9 and 12 are allowed. The following is an examiner's statement of reasons for allowance.

The instant claims are to a composition comprising a core with the formula,



including molar ratios as claimed, wherein M' includes magnesium, M'' includes cobalt and boron and a coating on the core having a greater ratio of Co:Ni than the core. The prior art does not teach a composition  $\text{Li}_x\text{M}'_z\text{Ni}_{1-y}\text{M}''_y\text{O}_2$ , wherein M' includes magnesium, M'' includes cobalt and boron and a coating on the core having a greater ratio of Co:Ni than the core.

Further, the prior art does not teach the composition  $\text{Li}_x\text{Mg}_z\text{Ni}_{1-y}\text{Co}_y\text{Q}_v\text{O}_2$  and a coating on the core having a greater ratio of Co:Ni than the core. The prior art does not teach core compositions of these formulae with a coating on the core having a greater ratio of Co:Ni than the core.

The most pertinent prior art includes Kitano (JP 2000-149,950), which teaches a composition comprising a core with the formula,  $\text{Li}_x\text{M}'_z\text{Ni}_{1-y}\text{M}''_y\text{O}_2$  ( $0 \leq y \leq 0.25$ ,  $0 \leq z \leq 0.15$ ) with M being a metal excluding Ni and Co. The term about is noted for the various values of each variable in the dependent claims. Examples of metals used for the variable M include Mg and Mn (paragraph 10.) The material has a magnesium-cobalt-lithium coating on the core inherently having a greater ratio of Co:Ni than the core as no Ni is in the coating. The reference does not teach a composition  $\text{Li}_x\text{M}'_z\text{Ni}_{1-y}\text{M}''_y\text{O}_2$ , wherein M' includes magnesium, M'' includes cobalt and boron and a coating on the core having a greater ratio of Co:Ni than the core or a composition  $\text{Li}_x\text{Mg}_z\text{Ni}_{1-y}\text{Co}_y\text{Q}_v\text{O}_2$  and a coating on the core having a greater ratio of Co:Ni than

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the core. In addition, JP 11-040,153 teaches a composition comprising a core with the formula,  $\text{Li}_x\text{B}_v\text{Ni}_x\text{Co}_y\text{CaO}_2$  with the molar ratios in the claimed ranges. The material does not include coating on the core having a greater ratio of Co:Ni. JP 10-208,743 teaches a positive electrode active material of the formula  $\text{Li}_w\text{Mg}_v\text{Ni}_x\text{Co}_y\text{B}_z\text{O}_2$ . The material does not include coating on the core having a greater ratio of Co:Ni. The prior art references do not teach core compositions of these formulae with a coating on the core having a greater ratio of Co:Ni than the core.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### ***Examiner Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Ruthkosky whose telephone number is 571-272-1291. The examiner can normally be reached on FLEX schedule (generally, Monday-Thursday from 9:00-6:30.) If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached at 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free.)

Mark Ruthkosky

Primary Patent Examiner

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*Mark Ruthkosky*  
3/4/05